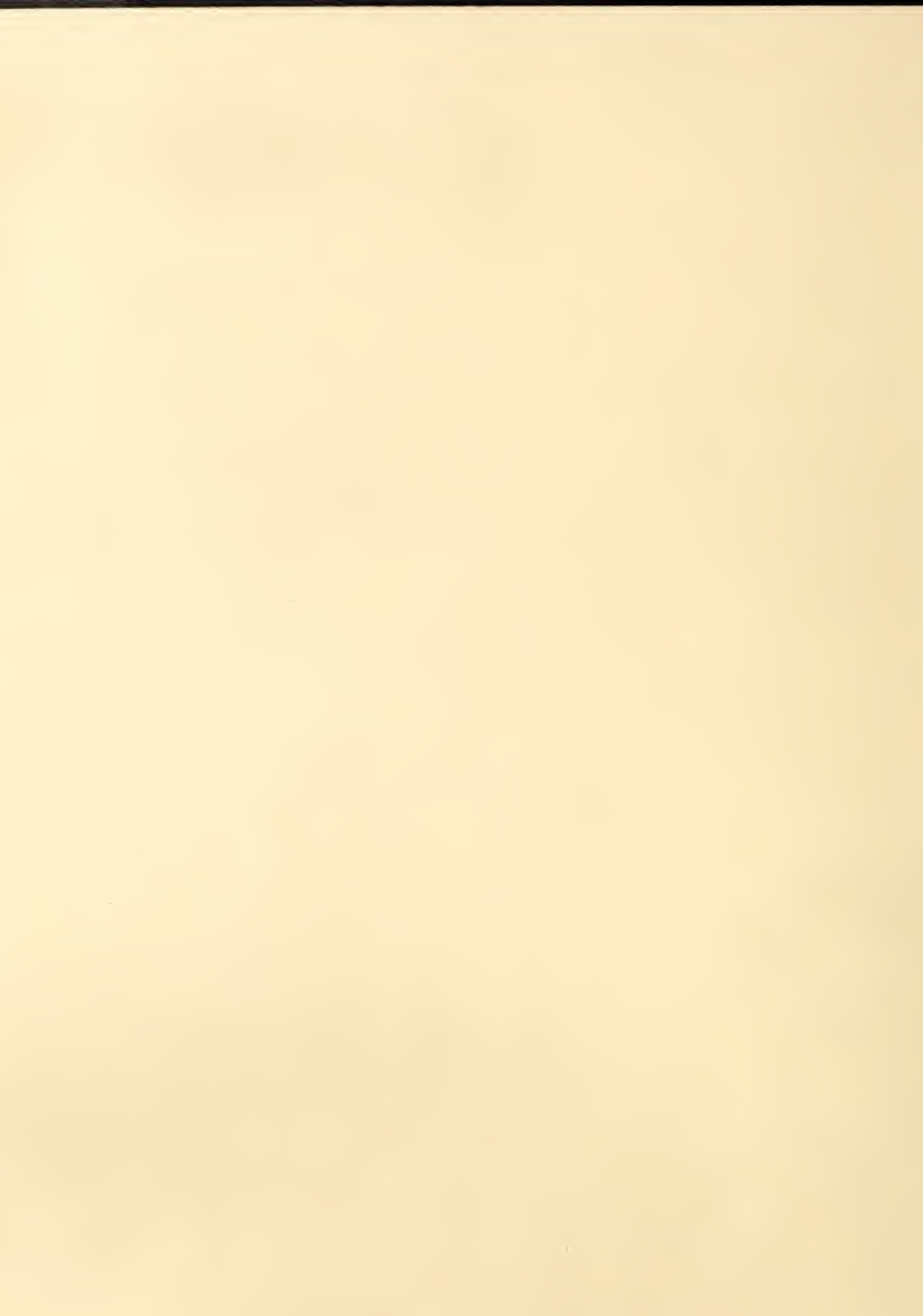


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UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Administration  
Washington, D. C.

REQUIREMENTS FOR THE PACKAGING OF BUTTER AND EGGS UNDER  
CERTIFICATES OF QUALITY AND/OR GRADE LABELS

The following information about general requirements and equipment for rooms used in the official grading, handling, and packaging of butter or of eggs under certificates of quality and/or grade labels, is issued for the guidance of applicants and users of this service, and for official samplers, graders, and supervisors of packaging. Specifically, it relates to: (1) Sanitary conditions of such rooms; (2) the taking of proper samples of butter for keeping-quality tests; (3) the taking, preparing, and handling of official samples of butter for official grading; and (4) the duties of supervisors of packaging, and of supervisors of persons whose services are utilized in the supervision of packaging.

Sanitary Requirements for Rooms Used for Printing and Packaging  
Butter and for Candling, Grading, and Packing Eggs

Rooms used for the printing and packaging of butter, or for the candling, grading, and packaging of eggs that are to be merchandised in retail packages under certificates of quality or grade seals, or which butter and eggs are to be packed to meet the requirements of contracts calling for an officially graded product, shall be so constructed, equipped, and maintained as to meet the strict sanitary requirements for the handling of these products. The following requirements are prescribed for:

(1) Butter Printing and Packaging Rooms.

- a. Floors, walls, ceilings and all equipment shall be maintained in a clean and sanitary condition at all times.
- b. If the walls are painted, the condition of the paint shall be properly maintained so that there will be no flaking or falling off of particles of paint.
- c. Floors shall be constructed of a material impervious to moisture; shall provide adequate and suitable drainage with sewer outlets properly trapped and shall be maintained in that condition.
- d. An ample supply of hot and cold water and of steam, if necessary, shall be made available through the proper outlets, for the thorough washing and cleaning of all equipment and of the room, at the close of each day's operation or more frequently, if necessary.
- e. Rooms shall be adequately lighted and ventilated.

- f. Suitable storage space, either in a separate room, or in a cabinet free from dust, dampness, and mold shall be provided for the keeping of supplies of packing materials, certificates of quality, and grade labels, or other materials or records approved by the Agricultural Marketing Administration for use in the packaging of officially graded butter.
- g. All operators shall wear clean white uniforms and caps, and all women operators shall wear hair nets.
- h. Suitable rest and wash rooms shall be provided and shall be maintained in a sanitary condition and be supplied with soap and paper towels.
- i. Proper precaution shall be taken so that there will be no vermin in the rooms.

(2) Egg Candling, Grading, and Packaging Rooms.

- a. The rooms used shall be maintained in a clean and sanitary condition at all times.
- b. Barrels, preferable metal, shall be provided for the disposition of waste materials, these shall be kept sweet, clean, and free from decomposed egg odors.
- c. Trays or containers shall be provided for leakers. Such containers shall be of metal and be kept sweet and clean at all times.
- d. Suitable storage space shall be provided in a separate room or cabinet, free from dust, dampness, and mold, for keeping supplies of packing materials, certificates of quality, and grade labels that have been found satisfactory by the Agricultural Marketing Administration for use in the packaging of officially graded eggs and the wording on which refers to the officially graded character of the product in the package.
- e. The walls and ceilings shall be kept free of loose dirt or other extraneous materials, and the floors shall be maintained in a clean condition.
- f. The candling rooms shall be adequately equipped with suitable candling apparatus.
- g. Suitable rest and wash rooms shall be provided and shall be maintained in a sanitary condition and be supplied with soap and paper towels.

(3) Supervision of Rooms Used for the Printing and Packaging of Butter and for Candling, Grading, and Packaging Eggs.

- a. The supervisor of packaging shall be responsible for the continuous inspection of the rooms and equipment to see that they are maintained in a sanitary condition.
- b. The supervisor of packaging shall report to the supervisory

representative of the Agricultural Marketing Administration any changes that have been made or that are proposed in the rooms or the equipment, and also any particulars in which the rooms are not being properly maintained or used.

- c. The supervisor of packaging shall keep such records as may be required by the Agricultural Marketing Administration with reference to the maintenance of rooms and equipment used in the packaging of officially graded products.

Instructions for Taking Samples of Butter for Keening-Quality Tests  
and For Making Keening-Quality Tests

A firm authorized to package officially graded butter under certificates of quality may be required by the Agricultural Marketing Administration to provide and maintain the necessary equipment for making keening-quality tests of butter.

Necessary equipment:

1. Keening-quality cabinet or incubator equipped with a thermostat that maintains a uniform temperature of from 68 to 70 degrees Fahrenheit.
2. A sufficient supply of sterile, screw-top jars of two-ounce or larger capacity.
3. Wire baskets for holding the sample jars.
4. Sterile table knife or spatula for taking samples.
5. Heating element which may consist of three or four 60-watt light bulbs or the approximate equivalent.
6. A room or other place in which a temperature above 32 degrees Fahrenheit, but not above 70 degrees Fahrenheit, can be maintained and in which the keening-quality cabinet may be placed.
7. A sterilizing cabinet.

Specifications for Keening-Quality Cabinet:

A well-insulated, large household or other refrigerator, when properly equipped, will provide a satisfactory keening-quality cabinet. The size of the cabinet may vary depending upon the number of samples to be incubated. A properly insulated refrigerator, 3 by 3 by 4 feet, will accommodate approximately 500 samples. When the samples are incubated in glass jars, the jars should be placed in wire baskets or trays, each basket holding 24 to 36 jars.



Wire grill shelves in the cabinet should be provided for each day's samples. The thermostat must be very sensitive. Unless it is, the temperature will fluctuate over a wide range and when it rises above 70 degrees Fahrenheit the samples will have a tendency to oil off, thereby destroying or lessening the value of the keeping-quality test. The thermostat may be set or regulated according to seasonal conditions so as to maintain a temperature of 69 degrees Fahrenheit during the summer months and 70 degrees Fahrenheit during the winter months or seasons when fats are harder. The heating element, consisting of four 60-watt electric light bulbs, should be connected in a series with the thermostat. The total light wattage will depend upon the size of the keeping-quality cabinet and the number and type of the samples incubated, whether kept in glass jars or cut and wrapped as prints.

A small electric fan may be installed to provide air circulation and maintain a uniform temperature in all parts of the cabinet. The fan should be connected to the thermostat and set to run for a short period of time after the lights are automatically cut off. The fan and lights should turn on automatically whenever the temperature drops 2 degrees Fahrenheit. This will control the temperature so it will not vary more than 2 degrees Fahrenheit on the top and bottom shelves, although the shelves are filled to capacity; for the forced air circulation will keep the temperature uniform.

The sterilizing cabinet may be constructed of copper or galvanized iron. It is desirable that it be made with a perforated, raised false bottom, so the steam may enter at the bottom.

#### Sampling Procedure

When placed in 2-ounce glass jars, butter samples may be taken by the grader at the time he grades the butter by transferring a small portion of the butter from the trier sample to the glass jar by means of a sterile wooden spatula. The jars should not be filled more than three-fourths full, for if they are too full, it is more difficult to obtain the aroma. The date of grading, creamery number, churning number, and score grade should be written on the can of each jar.

Quarter-pound or 1-pound prints may be used as samples instead of the 2-ounce glass jar samples. When the larger samples are used, they may be taken by the official supervisor of packaging.

The samples should be placed in the incubator and be held at a uniform temperature of 70 degrees Fahrenheit for a period of 7 days. When samples for salt and moisture determination are taken in addition to the keeping-quality samples, each churning of butter may first be graded, after which the composition sample and the keeping-quality sample may be taken.

At the end of the fifth day and again at the end of the seventh day, the official butter grader should examine each sample and record any noticeable flavor characteristic that indicates deterioration. After the tests are completed, the butter should be removed from the jars and the jars and

cans should be thoroughly washed with a washing powder solution to remove all fatty particles. The jars and cans should then be rinsed in hot water (135 degrees to 150 degrees Fahrenheit) and later in a solution to which a chemical sterilizer has been added. After the jars have drained thoroughly and the covers have been loosely placed on them, they should be placed in the sterilizer. The temperature in the sterilizer should be maintained at approximately 200 degrees Fahrenheit for at least 1 hour.

#### Action to be Taken When Samples Show Marked Deterioration

When at the end of the fifth or the seventh day any of the samples from a creamery show marked deterioration, and the butter is still on hand, the applicant should be immediately advised by the official grader that the butter from that creamery cannot be used for packaging with certificates of quality. If the butter has already been packaged with certificates of quality and has not been sold, the applicant should be directed to remove these certificates from the packages, the supervisor of packaging making sure that this is done. If the butter has been shipped or sold, the receiver should be notified and directed to remove the certificates of quality. If the butter in question has already been delivered to retail stores, the distributor should, if possible, replace the butter and remove the certificates of quality from the reclaimed packages.

#### Action Required When Butter from a Creamery has Poor Keeping Quality

When butter from a creamery has poor keeping quality, as shown by keeping-quality tests of samples from each separate churning, both the applicant for grading and the creamery operator should be advised of the results of the test and that the product of the creamery may not be packaged under certificates of quality. They should also be advised that unless and until keeping-quality tests of butter of subsequent churnings from the creamery indicate that it is producing butter of satisfactory keeping quality, the product of that creamery cannot carry certificates of quality.

#### Permanent Records of Keeping-Quality Tests.

The official grader shall keep such permanent and detailed records of the results of keeping-quality tests of butter as are required by the instructions furnished him. Blank report forms are provided for that purpose, on which to keep a continuous and permanent record of the keeping-quality tests of butter from each creamery whose product qualifies for packaging with certificates of quality, and these records must be available for future reference and use.

#### Procedure for Drawing, Preparing, and Handling Official Samples of Butter and Preparing Official Samplers' Certificates

In taking official samples of butter, the sampler shall properly identify and make record of the number of packages and stencil marks of each churning of butter to be sampled. This is important for unless the packages constituting each churning from which the samples are taken are properly



identified, it will be improper for the official grader to stamp these packages with a grade, upon receiving the report of grading from the grading office.

When samples are drawn from bulk packages, a 1-pound sample shall be taken from each churning. The sample from each churning should be taken from the bulk package by removing the butter from the container and with a sterile knife or ladle cutting a V-shaped portion adequate to fill the sample container. The samples should be packed firmly and solidly in the containers in which they are to be shipped. The sample containers should be round fibre cans or containers such as those used for ice cream. Glass jars should never be used. The butter should be packed so that there are as few air spaces or pockets in the sample as possible.

In taking samples of cut and wrapped butter, not less than a 1-pound print should be taken from each churning.

Each sample container shall be sealed by the official sampler with gummed tape, or by other adequate means. If gummed tape is used, it should be marked or initialed by the sampler. After the samples are packed in the containers, they should be placed, before shipment, in a refrigerator at as low a temperature as is available to insure that they are firm when they arrive at the grading station. If dry ice is not available for packing the samples, they should be held under refrigeration for several hours, or over night in a sharp freezer, or on the frosted cold in a refrigerated room until frozen.

After the butter is frozen, the individual sample containers should be wrapped in several thicknesses of newspaper and tightly packed in a heavy fibre box or carton, with dry ice, if it is available; the shipping container should, in turn, be wrapped in heavy Kraft paper and securely tied with wrapping cord. The container must be plainly and correctly addressed to the office where the samples will be graded. All samples should be plainly marked with the name and the address of the company where the samples were taken, the name and the address of the creamery, if known, the churn number from which each sample was taken, the date of manufacture, if known, and the total number of packages and pounds of butter in each churning as represented by each sample.

Shipment of the samples to the grading office should be made by prepaid express or parcel post, to arrive not later than Friday. It is important that samples do not arrive on Saturday or Sunday, since the delay entailed before they can be graded may cause them to deteriorate and, therefore, not properly to represent the character and quality of the butter from which they were drawn.

After completing the grading of each sample, the grading office will report the findings for each churning sampled and forward them to the sampler. The grading office will also issue a regular grading certificate covering the lot of butter from which the samples were drawn. Upon receipt by wire or mail of information from the grading office as to the grade of the butter, the sampler should give this information to the applicant, and, at the same time, should stamp the packages of butter according to the quality found by the grader in the sample for each churning. This stamp will indicate that the



butter in the packages meets the requirements of the contract on which it is delivered. Before he applies the stamp, the sampler should make sure that the butter in the package and the graded sample are identical.

The official sampler of butter must make out a regular sampler's certificate on approved forms which are furnished for that purpose. A sampler's certificate must be issued to cover each lot of official samples forwarded to the grading office. The copy attached hereto should be noted carefully. Each item must be filled in on the certificate before it is signed by the official sampler. The applicant for grading must sign the application form at the bottom of the sampler's certificate and must state the disposition to be made of the samples. The sampler's certificate shall be issued in triplicate for each lot sampled. The original sampler's certificate and a duplicate shall be enclosed with each lot of samples shipped and a copy shall be retained in the official sampler's file. It is important that the sampler's certificate be completely and properly made, for otherwise the grading office may be unable to grade the samples submitted or to render a report which will meet with the requirements of the applicant. Samples of butter may be taken by persons other than an official sampler and forwarded to the grading office for grading. In such a case, the grading certificate issued shall cover only the samples submitted and it will not be proper for the packages from which the samples were taken to be stamped with an official grade stamp.

#### Duties of Official Supervisors of Packaging

The following shall be the duties of official supervisors of packaging of butter and/or eggs which are to be packed under certificates of quality or grade labels, or which are to be packed as an officially graded product for delivery on contracts:

1. He shall be directly responsible to the Federal or the Federal-State supervisor of grading or to the officer in charge of the local grading office for the proper performance and conduct of his work.
2. He shall keep in his custody or under his control all supplies of certificates of quality, grade labels, and packing materials used in retail packaging where the printing on them refers to the officially graded character of the produce which they cover.
3. He shall see that only officially graded products of the proper U. S. grade are packed with certificates of quality or grade labels. He shall also closely check all products packed to fill contract orders requiring delivery of officially graded products, to see that only such products are delivered.
4. He shall maintain a file of approved certificates of quality and grade labels and such packing materials as have been found satisfactory in the conduct of the work, and shall see that only such materials are used in packaging products as meet the requirements of certificates of quality or grade labels.

5. He shall be responsible for the proper application to, or inclusion in, packages of the certificates of quality and grade labels, and shall see that they are properly stamped or perforated as required.
6. He shall, when so instructed by his supervisor or by the official butter grader, take 1/4 or 1-pound prints of butter from churnings that are being packed, for use as samples for keeping-quality tests.
7. He shall report to the proper representatives of the Agricultural Marketing Administration any irregularities in the use of certificates of quality, grade labels, and packing materials that may come to his attention.
8. He shall keep a daily record of the number of units of products packaged under certificates of quality and grade labels. Such record shall have the grading certificate number and the date of grading stamped or perforated on the certificates or labels, together with a record of such certificates of quality or grade labels as may be destroyed or lost.
9. He shall prepare, sign, and issue certificates of packaging covering all products packaged with certificates of quality or grade labels in the plant in which he is employed, or to which he is assigned for duty.
10. He shall keep such other records as may be required by the Agricultural Marketing Administration.

#### Duties of the Supervisors of the Supervisors of Packaging

Supervisors of grading work and official graders shall perform the following duties on each visit to a plant in which a supervisor of packaging is employed:

1. He shall visit the rooms where the officially graded product is prepared or packed and shall talk with the supervisor of packaging and inspect his records.
2. He shall advise the supervisor of packaging with reference to any phases of his work on which he needs information.
3. He shall make careful check on the sanitary condition of the rooms and equipment for the preparation or packaging of officially graded product.
4. He shall make careful check of the certificates of quality, grade labels, and packing materials in use, to make sure that they have been officially approved. He shall also make careful check of the product that is to be packaged, is being packaged, or has been packaged, to see that it is officially graded and is of the required grade. He shall also see that the perforation or stamping of the

certificates of quality or grade labels is properly and adequately done.

5. He shall assist the supervisor of packaging in solving any problems, and he shall discuss with the plant management any changes in equipment or method of operation or any other action that may be needed.
6. He shall report to the proper representatives of the Agricultural Marketing Administration any matters concerning the packaging of officially graded products under certificates of quality or grade labels that are not proper and shall make such recommendations as are appropriate.

April 15, 1942

Date



Associate Administrator

